

Form MR-SMO
(Revised July 25, 2012)

This Section for DOGM Use:

Assigned DOGM File No.: S/O 35/0055
DOGM Lead: Jim
Permit Fee \$ 150 Ck# Online CC Paid

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1594 West North Temple Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801
Telephone: (801) 538-5291 Fax: (801) 359-3940

RECEIVED

JUN 15 2022

DIV OF OIL, GAS & MINING

NOTICE OF INTENTION TO COMMENCE SMALL MINING OPERATIONS

The information requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1987, and the General Rules as promulgated under the Utah Minerals Regulatory Program (R647). The rules and Act are available online at <http://www.rules.utah.gov/publicat/code/r647/r647.htm> and http://le.utah.gov/~code/TITLE40/40_08.htm.

Cultural Resources Survey: To fulfill its obligations under Utah Code Annotated 9-8-404, the Division needs cultural resource (archaeology) information. The amount and type of information required will depend on the mine location, the history of previous disturbance, and other factors. Please contact the Division for further information.

A permit fee of \$150 must accompany this application (Utah Code Ann. §40-8-7(1)(i)) and is due annually.

"Small Mining Operations" are operations which have a disturbed area of ten or fewer surface acres at any time in unincorporated areas, or five acres or fewer in incorporated areas.

I. GENERAL INFORMATION (Rule R647-3-104)

1. Name of Mine: I-80 South Quarry
- 2.A. Name of Entity Applying for a Permit: Granite Construction Company
Contact (Authorized Officer): Mike Tatusko
Mailing Address: 1000 N Warm Springs Road
City, State, Zip: Salt Lake City, UT 84116
Phone: 801-526-6126 Fax: 801-562-6049
E-mail Address: I80.SouthQuarry@gcinc.com

Entity is a: (X) Corporation, () LLC, () Sole Proprietorship (dba), () Individual, () Partnership (General, or limited), () Other (specify type) _____

Business Entity (not individuals) must be registered (and maintain registration) with the State of Utah, Division of Corporations (DOC) If not currently registered, contact www.commerce.utah.gov to renew or apply.

- 2.B. Are you currently registered to do business in the State of Utah? (X) Yes () No

Business Entity #: 624643-0143

Local Business License #: _____ (if required)

Issued by: County: Salt Lake County or City: _____

Registered Utah Agent (as identified with the Utah DOC) (if individual leave blank):

Name: CT CORPORATION SYSTEM Title: Operator

Address: 585 West Beach Street

City, State, Zip: Watsonville, CA 95077

Phone: 801-526-6126 Fax: _____

E-mail Address: I80.SouthQuarry@gcinc.com

2.C. Entity's Representative(s) (if different from #2A) authorized and designated to receive notices of violation, cessation orders, and all other notices to be given to the permittee or operator by the Division.

Name: Same as #2A Title: _____
 Address: _____
 City, State, Zip: _____
 Phone: _____ Fax: _____
 Emergency, Weekend, or Holiday Phone: _____
 E-mail Address: _____

Name: _____ Title: _____
 Address: _____
 City, State, Zip: _____
 Phone: _____ Fax: _____
 Emergency, Weekend, or Holiday Phone: _____
 E-mail Address: _____

3. If Business is a Sole Proprietor (dba) or Individual:

Name of Owner: _____ Title: _____
 Business Address: _____
 City, State, Zip: _____
 Phone: _____ Fax: _____
 E-mail Address: _____

If Business is a Corporation:

Name of Officers: Kyle Larkin Title: CEO
 Name: _____ Title: _____
 Name: _____ Title: _____
 Name: _____ Title: _____
 Headquarters Address: 585 West Beach Street
 City, State, Zip: SLC, UT 84116
 Phone: 801-526-6126 Fax: _____
 E-mail Address: l80.SouthQuarry@gcinc.com

If Business is a Limited Liability Company: Member Managed (☐) Manager Managed (☐)

Name of 1st Member/Manager: _____ Title: _____
 Business Address: _____
 City, State, Zip: _____
 Phone: _____ Fax: _____
 E-mail Address: _____

Name of 2nd Member/Manager: _____ Title: _____
 Business Address: _____
 City, State, Zip: _____
 Phone: _____ Fax: _____
 E-mail Address: _____

If Business is a Partnership:

Names of Partners: _____
 Business Address: _____
 City, State, Zip: _____
 Phone: _____ Fax: _____
 E-mail Address: _____

If Business is a Partnership:

Names of Partners: _____
 Business Address: _____
 City, State, Zip: _____
 Phone: _____ Fax: _____
 E-mail Address: _____

5. Ownership of Land Surface:

Private (Fee) (☒) BLM (☐) US Forest Service (☐)
 State Trust Land/School Sections (☐) State Sovereign Lands (☐)

Other (please describe):

Name Tree Farm LLC Address PO Box 711820 Salt Lake City, UT 84171

Name _____ Address _____

Name _____ Address _____

Name _____ Address _____

6. Ownership of Minerals:

Private (Fee) (☒) BLM (☐) US Forest Service (☐)
 State Trust Land/School Sections (☐) State Sovereign Lands (☐)

Other (please describe):

Name Tree Farm LLC Address PO Box 711820 Salt Lake City, UT 84171

Name _____ Address _____

Name _____ Address _____

Name _____ Address _____

BLM Claim Number(s): _____

Utah State Lease Number(s): _____

BLM/USFS Lease or Project File Number(s): _____

Name of Lessee(s): _____

7. **Have the above surface and mineral owners been notified in writing?** Yes ☒ No _____
 If no, why not? _____

8. **Does the Entity have legal right to enter** and conduct mining operations on the land covered by this notice? Yes ☒ No _____

What is the pre-mining land use, i.e. cropland, grazing, wildlife habitat? Private recreation; historic mining and access/haul roads; electrical transmission lines; transmission line access roads; and wildlife habitat

What is the postmining land use? Public and/or private recreation; electrical transmission lines; transmission line access roads; wildlife habitat; and other uses consistent with private ownership

Once mining is complete the operator will conduct reclamation as required by these rules.

*Please be advised that if State Trust Lands are involved, notification to the Division of Oil, Gas and Mining alone does not satisfy the notification requirements of Mineral Leases upon State Trust Lands. Exploration or mining activity on State Trust Lands requires a minimum of 60 days notice to the Trust Lands Administration **prior** to commencing any activities. Please contact the School Institutional Trust Lands Administration (SITLA) at (801) 538-5508 for notification requirements.*

II. PROJECT LOCATION & MAP (Rule R647-3-105)

1. **Project Location & Map** (legal description):

County(ies): Salt Lake County

____ 1/4, of SW ____ 1/4, of NE ____ 1/4, Section: 17 Township: 1 South Range: 2 East

____ 1/4, of NW ____ 1/4, of SE ____ 1/4, Section: 17 Township: 1 South Range: 2 East

_____ 1/4, of NE _____ 1/4, of SE _____ 1/4, Section: 17 _____ Township: 1 South Range: 2 East
 _____ 1/4, of _____ 1/4, of _____ 1/4, Section: _____ Township: _____ Range: _____
 UTM East: _____ 437,062.63 (if known) UTM North: _____ 4,509,662.89 (If known)
 Name of Quad Map for Location: Mount Aire

2. **Is the project within an incorporated area?** (☐) Yes (☒) No
 If yes, what is the town or city? _____
3. **Location and Operations maps** must be plotted at a scale to accurately identify locational landmarks and operations details. All maps must include a north arrow, scale, appropriate labels, and title box including the mine name, township, range and section.
 - a. The **general location map** must be the scale of a USGS 7.5 minute series map or equivalent (1"=2000') and identify new or existing access roads.
 - b. The **operations map** (1"=200' or other scale as determined necessary by the Division) must be labeled and identify:
 - i. The area to be disturbed;
 - ii. The location of any existing or proposed operations including access roads, drill holes, trenches, pits, shafts, cuts, or other planned activities; and
 - iii. Any adjacent previous disturbance for which the operator is not responsible.
 (Contact the Division for a list of consultants and land surveyors for mapping assistance.)
4. The proposed disturbed area (including access/haul roads) should be marked ON THE GROUND with metal T-Posts (or with some other marker of equal effectiveness). Markers should be appropriately spaced so that the next marker in either direction is clearly visible with the naked eye.

III. **OPERATION PLAN** (Rule R647-3-106)

1. **Type of mining:** Surface (☒) Underground (☐)
2. **Mineral(s) to be mined:** Limestone hard rock. If deleterious or potentially deleterious materials become present on the site, the Operator will take preventative actions to mitigate impacts. All deleterious or potentially deleterious material will be safely removed from the site or left in an isolated or neutralized condition such that adverse environmental effects are eliminated or controlled. This is a limestone-based mining operation that will not liberate any toxic or acid-forming materials requiring neutralization.
3. **Amount of material** to be extracted, moved, or proposed to be moved: To be mined consistent with R647-3-114.
4. Will any **water, liquid chemicals, reagents, or other solutions** be used, produced, or discharged as part of the mining or milling process? Yes (☒) No (☐) If yes, please describe (add extra pages if needed): Water for fugitive dust control. Storm Water Pollution Plan (SWPPP) and Spill Prevention, Control, and Countermeasure (SPCC) plans will be developed specifically for this operation. All man-made structures, trash and other waste will be removed and disposed of at an approved local sanitary landfill or other appropriate facility.
5. Provide a brief **description of the proposed mining operation**, and onsite processing facilities (add extra pages if necessary). On-site activities will include blasting, crushing, screening, dozing, hauling, etc. typical to similar surface mine operations. A qualified/licensed blasting

consultant will be engaged for drill and blast procedures. The Operator will coordinate with Utah Highway Patrol (UHP) and Utah Department of Transportation (UDOT) prior to any blasting activities under this Notice. Such coordination will provide adequate lead time for UHP and UDOT to review proposed plans and implement any necessary traffic safety provisions. Mine operation will comply with all applicable Utah Department of Environmental Quality rules and regulations.

6. () **New Road(s)**: Length 0 (ft), Width 0 (ft)
7. () **Improved Road(s)**: Describe improvements that need to be made to existing roads to access the site, including the Length 0 (ft) and Width 0 (ft) **of new disturbances**.
The mine will be accessed using the existing access road.
-
8. Total project surface **acreage to be disturbed**: 20 (acres) PLEASE SPECIFY **EXACT ACREAGE** *(this will be used to determine surety bond amount – see #VI).*
9. Proposed **startup date** (month, year): 16 July 2022
10. Proposed **completion**, if known (month, year): Unknown

IV. OPERATION AND RECLAMATION PRACTICES (Rule R647-3-107, 108 & 109)

The reclamation and operation obligation are to keep the area clean and safe, minimize hazards to public safety, return the land to a useful condition, and reestablish at least 70 percent of the premining vegetative ground cover or within practical limits. To accomplish this, the Permittee / Operator will need to perform reclamation concurrently, or at the completion (within one (1) year) of mining. Please refer to The Practical Guide to Reclamation in Utah, available at:

https://fs.ogm.utah.gov/pub/MINES/Coal_Related/RecMan/Reclamation_Manual.pdf.

1. *Keep the mining operation in a safe, clean, and environmentally stable condition.*
2. *Permanently seal all shafts and tunnels to prevent unauthorized or accidental entry.*
3. *Plug drill holes with a five-foot cement surface plug. Holes that encounter fluids are to be plugged in the subsurface to prevent aquifer contamination.*
4. *Construct berms, fences, or barriers, when needed, above highwalls and excavations.*
5. *Remove, isolate, or neutralize all toxic materials in a manner compatible with federal and state regulations.*
6. *Remove all waste or debris from stream channels.*
7. *Dispose of any trash, scrap metal, wood, machinery, and buildings.*
8. *Conduct mining activities to minimize erosion and control sediment.*
9. *Reclaim all roads that are not part of a permanent transportation system.*
10. *Stockpile topsoil and suitable overburden prior to mining.*
11. *Stabilize highwalls by backfilling or rounding to 45 degrees or less, where feasible; reshape the land to near its original contour and redistribute the topsoil and suitable overburden.*
12. *Properly prepare seedbed to a depth of six inches by pocking, ripping, discing, or harrowing. Leave the surface rough.*
13. *Reseed disturbed areas with adaptable species. (The Division recommends a mixture of species of grass, forb, and browse seed, and will provide a specific species list if requested.)*
14. *Plant the seed with a rangeland or farm drill or broadcast the seed. Fall is the preferred time to seed.*

V. VARIANCE REQUEST (Rule R647-3-110)**Any variance must be approved writing *in advance* by the Division**

Any planned deviations from Rules R647-3-107, Operation Practices, R647-3-108, Hole Plugging Requirements, or R647-3-109, Reclamation Practices, as summarized above (see IV. Operation and Reclamation Practices Item # 1-14), should be identified below listing applicable rule number. Give justification for the variance(s) and alternate methods or measures to be utilized to meet the intent of the rule. Written approval from the Division will be given, if the proposed alternative methods to be used are consistent with the Act.

Are variances being requested? Yes (☐) No (☒)

Variance Requested

Item # Applicable Rule

Justification: _____

Alternate methods or measure to be utilized: _____

Attach additional page(s) if more variances are requested.

VI. SURETY (Utah Code Ann. §40-8-7(1)[c])

A reclamation contract and surety must be provided to and approved by the Division prior to commencement of operations. No surface disturbance is authorized until the surety is posted and approved in writing. The surety may be provided in the form of a certificate of deposit, a letter of credit, a surety bond, or cash. Please contact the Division for further information about submitting the surety. All mining operations are required to furnish and maintain reclamation surety to guarantee that the land affected is reclaimed (Utah Code Ann. §40-8-7(1)[c]).

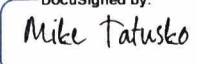
The reclamation surety amount is based on the nature, extent, and duration of operations. The amounts are based on data from current large mine surety and are used as a general guide, along with actual site conditions. Reclamation surety for small mines is reviewed every three (3) or five (5) years and adjusted as necessary for inflation/deflation based upon acceptable Costs Index. **Contact the Division for the dollar amount required for a three (3) or five (5) year period for this project.**

VII. SIGNATURE REQUIREMENT

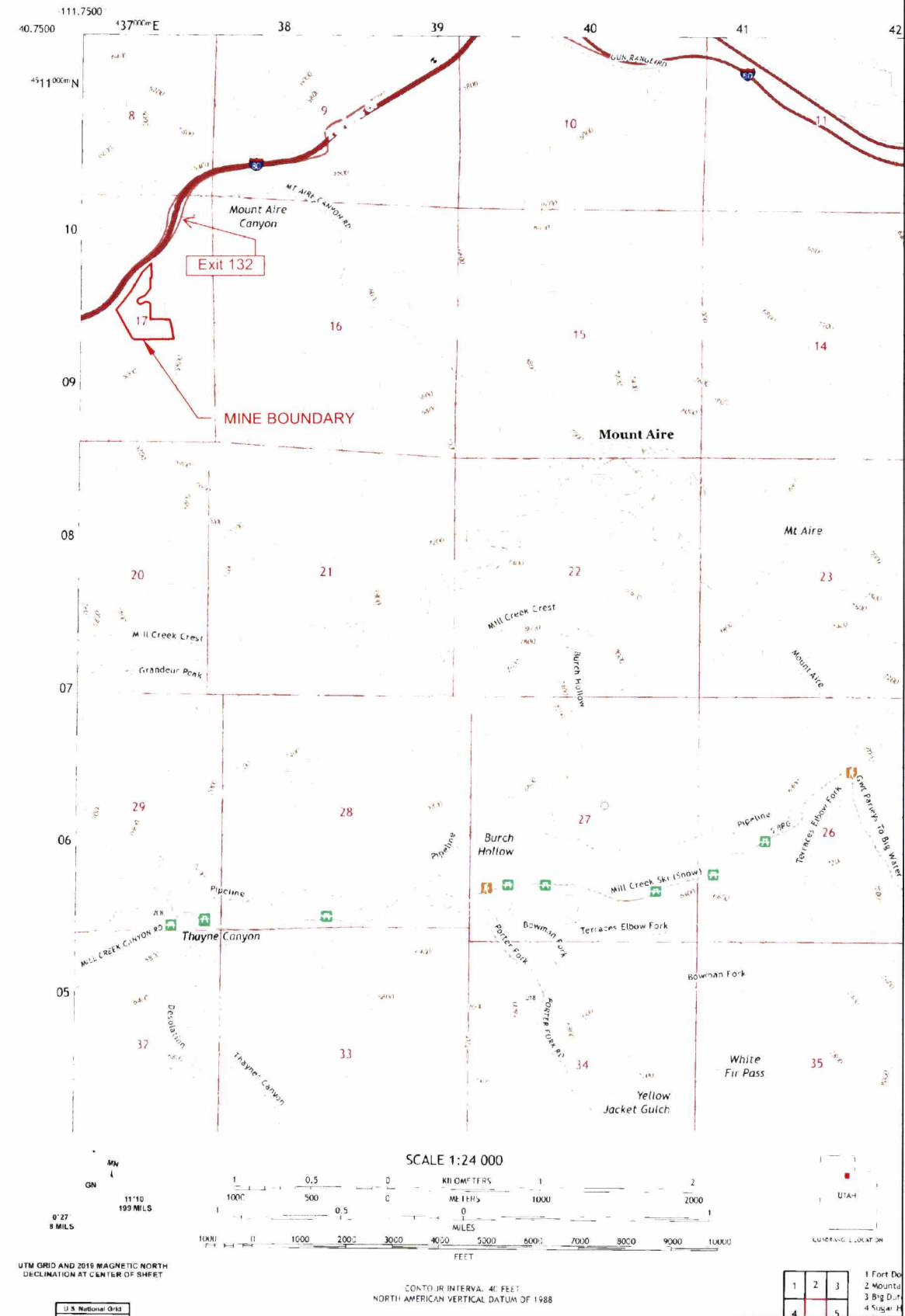
CERTIFICATION

I state under penalty of perjury under the laws of the state of Utah and the United States of America that:

- a. I have read this form and declare the information, statements and/or documentation are true, correct and complete to the best of my knowledge and belief; AND
- b. I commit to the reclamation of the aforementioned small mining project as required by the Utah Mined Land Reclamation Act (40-8) and the rules as specified by the Board of Oil, Gas and Mining.
- c. **This certification must be signed by:** (1.) an executive officer if the applicant is a corporation; (2.) a partner if applicant is a partnership (general or limited); (3.) the owner if applicant is a sole proprietorship; **or** (4.) the member or manager if applicant is a limited liability company.

DocuSigned by:

Signature: _____ Date: 6/15/2022
Name (typed or printed): Mike Tatusko
Title/Position (if applicable): Senior Vice President and Group Operations

Map shown is a portion of USGS UT_Mount_Aire Quadrangle, 2020



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FIGURE 1
General Location Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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REVISIONS

LEGEND

- Small Mine Area (20 ac)
- - - Parcel Line
- Access Road or Point
- Power Pole

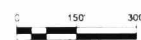
NOTES:

- Aerial photo from Google Earth (Imagery Date 9/11/2020)
- Offset:**
 - Property Lines: 25ft (mining)
 - Property Lines: 0ft (any disturbance)
 - Only along entrance road location
 - Powerpoles: 50ft



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FIGURE 2
Operations Map



1	1
F-2	
1	

Revisions

Mine Name

Bond Amount

Revised

Bonding Calculations Summary and Total

Direct Costs

Subtotal Demolition and Removal	\$73,210.40	
Subtotal Backfilling and Grading	\$127,763.98	
Subtotal Revegetation	\$20,000.00	20 acres at \$1000/acre
Direct Costs	\$220,974.38	

Indirect Costs

Mob/Demob	\$22,097.00	10.0%
Contingency	\$11,049.00	5.0%
Engineering Redesign	\$5,524.00	2.5%
Main Office Expense	\$15,026.00	6.8%
Project Management Fee	\$5,524.00	2.5%
Subtotal Indirect Costs	\$59,220.00	26.8%

Total Cost 2022 \$280,194.38

Number of years 5
Escalation factor 0.0464
Escalation \$71,324.00

Reclamation Cost Escalated \$351,518.38

Bond Amount (rounded to nearest \$1,000) \$352,000.00
2027 Dollars

Proposed \$186,000.00

Difference Between Cost Estimate and Bond -\$166,000.00
Percent Difference

Mine Name

Demolition Costs

Revised

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
		Demolition																		
		Crushers, Screens and Conveyors																		\$ 32 659.80
		Scale and Scale House																		\$ 15 902.60
		AST Removal																		\$ 24 648.00
		*The Division does not band for the Earth Moving Equipment Removal																		
		Total																		\$ 73,210.40

Mine Name

Demolition Costs

Revised

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Crushers, Screens, Conveyors																			
	Deduct 50% no interior walls																			
	Structure's Demolition Cost	Conveyors	02 41 16 13 0020	0.48	/cf	200	4	4							1	FT	1.3	4160	CF	1997
	Includes demolition, loading, and 20 mile haul (one way)	Jaw Crusher/Feeder	02 41 16 13 0020	0.48	/cf	40	12	12							1	FT	1.3	7488	CF	3594
		Cone Crusher	02 41 16 13 0020	0.48	/cf	40	12	12							1	FT	1.3	7488	CF	3594
		Screens (2)	02 41 16 13 0020	0.48	/cf	30	12	12							2	FT	1.3	11232	CF	5391
	Total Volume of Structures																	30368	CF	
	Subtotal																			14576
	Crusher and Screen Pads																			
	Concrete Demolition	Floor 6" thick reinforced wire mesh	02 41 16 17 0420	1.3	/SF	180	10									FT		1800	SF	2340
	Demolition Cost																			
	Concrete's Vol. Demolished							0.5								FT	1.3	43	CY	
	Loading and Transportation Cost	Loading Truck and haul with 40 mile cycle	31 23 23 30 1312	17.60	/CY															756.8
	Disposal Costs	Salt Lake County		12	/ton								1.8			tons/CY		77.4	CY	929
	Subtotal																			4025.8
	Crusher and Screen Footings																			
	Concrete Demolition	Footing 2' thick, 3' wide	02 41 16 17 1140	25	LF	450										LF		450	LF	11250
	Demolition Cost																			
	Concrete's Vol. Demolished							2	3								1.3	130	CY	
	Loading and Transportation Cost	Loading Truck and haul with 40 mile cycle	31 23 23 30 1312	17.60	/CY															
	Disposal Costs	Salt Lake County		12	/ton								1.8			tons/CY		234	CY	2808
	Subtotal																			14058
	Total																			32659.8

Mine Name

Demolition Costs

Revised

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Scale House																			
	Structure's Demolition Cost Includes demolition, loading, and 20 mile haul (one way)	Building Demolition (40 ft connex)	02 41 16 13 0020	0.48	/CF	10	20	10									1.3	2000	cf	960
	Structure's Vol. Demolished																	2000	cf	
	Rubble's Weight (exclude steel)	Salt Lake County		12	/ton								100				lb/cf	100	ton	
	Disposal Cost Non Steel	Salt Lake County		12	/ton													100	ton	1200
	Subtotal																			2160
	Scale																			
	Scale Demolition Cost Includes demolition, loading, and 20 mile haul (one way)	Scale removal	02 41 16 13 0020	0.48	/cf	120	10	4								1 FT	1	4800	CF	2304
	Total Volume of Structures																	4800	CF	
	Subtotal																			2304
	Scale Pad																			
	Concrete Demolition	Floor 6" thick reinforced wire mesh	02 41 16 17 0420	1.3	/SF	40	40									FT		1600	SF	2080
	Concrete's Vol. Demolished								0.5							FT	1.3	39	CY	
	Loading and Transportation Cost	Loading Truck and haul with 40 mile cycle	31 23 23 30 1312	17.6	/CY													39	CY	686.4
	Disposal Costs	Salt Lake County		12	/ton								1.8			ton/cy		70.2	ton	842
	Subtotal																			3608.4
	Scale Footing																			
	Concrete Demolition	Footing 2' thick, 3' wide	02 41 16 17 1140	25	LF	216										LF		216	LF	5400
	Concrete's Vol. Demolished						2	3									1.3	62	CY	
	Loading and Transportation Cost	Loading Truck and haul with 40 mile cycle	31 23 23 30 1312	17.6	/CY													62	CY	1091.2
	Disposal Costs	Salt Lake County		12	/ton								1.8			ton/cy		111.6	ton	1339
	Subtotal																			7830.2
	Total																			15902.6

Mine Name

Demolition Costs

Revised

Ref	Description	Materials	Means Reference Number (Facilities)	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Load ASTs for Disposal	12,000 gal AST	02 65 10 30 0130	2000	\$/tank						12000					gal		1	ea	2000
	Pump tank contents	Per tank fee	02 65 10 30 0320	510	\$/tank										1	ea		1	ea	510
	Dispose of tank sludge	Assume 1/4 full	02 65 10 30 0390	6.6	\$/gal						3000					gal		3000	gal	20400
	Add dry ice to the tank (inert gas)	1.5lb/100 gal @12,000 gal	02 65 10 30 0401	2.4	\$/lb						180					lbs		180	ea	432.00
	Disconnect and remove piping	cost per LF of pipe	02 65 10 30 0503	5.2	\$/LF						30					ft		30	ft	156.00
	Haul tank to salvage	100 miles round trip	02 65 10 30 1029	1150	\$/tank										1	ea		1	ea	1150
	Total																			24,648.00

Mine Name

Earthwork Costs

Revised

Equipment List	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Process Description	Quantity	Units	Production Rate	Units	Quantity of Material to be Moved	Units	Cost
4x4 3/4 ton conventional diesel	194.01	9.53	0.1		15.82	Transportation throughout site	120	hrs					\$ 1,898
Dozer - D8T	9570	124.85	0.1	89.85	490.36	Dozing topsoil piles	80	hrs	202	cy/hr	16,133	CY	\$ 39,229
Dozer - D8T	9570	124.85	0.1	89.85	490.36	Grading topsoil and scarifying	9	hrs	2.24	ac/hr	20	AC	\$ 4,413
Dozer - D8T	9570	124.85	0.1	89.85	490.36	Grading topsoil and scarifying	23	hrs	716	cy/hr	16,133	CY	\$ 11,278
Loader Cat 980 M	3520	59.55	0.1	89.85	252.16	Loading trucks with topsoil from stockpile	30	hrs	532	cy/hr	16,133	CY	\$ 7,565
Excavator 330 F L	4630	60.97	0.1	89.85	284.24	Knocking down abandoned high walls (estimate)	35	hrs	422	cy/hr	15,000	CY	\$ 9,948
Labor				67.9	67.9	Running Equipment	203	hrs					\$ 13,784
Water Truck DSL 6x4 4000 gal	4000	74.06	0.1	79.25	270.72	Watering dozer path and roads	120	hrs					\$ 32,486
Articulated Truck Cat 725C2	4740	59.87	0.1	79.25	275.46	Placing topsoil throughout site. Average roundtrip haul length: 1,200 ft, speed: 10 mph, & load: 20 CY	26.00	hrs	621.4	cy/hr	16,133	CY	\$ 7,162
Total													\$ 127,764

Rental Rate Blue Book®

February 22, 2022

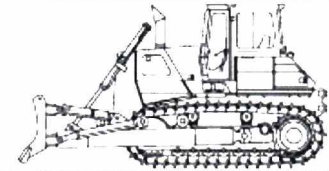
Caterpillar D8T

Standard Crawler Dozers

Size Class:

260 - 359 HP

Weight:

75845 lbs

Configuration for D8T

Dozer Type
Power Mode

Semi-U
Diesel

Operator Protection

EROPS
Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs Hourly	FHWA Rate** Hourly
	Monthly	Weekly	Daily	Hourly		
Published Rates	USD \$34,180.00	USD \$9,570.00	USD \$2,395.00	USD \$360.00	USD \$124.85	USD \$319.05
Adjustments						
Region (100%)	-	-	-	-		
Model Year (2022: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	USD \$34,180.00	USD \$9,570.00	USD \$2,395.00	USD \$360.00	USD \$124.85	USD \$319.05

Non-Active Use Rates

Standby Rate

Hourly

USD \$93.22

Idling Rate

USD \$230.63

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	32%	USD \$10,937.60/mo
Overhaul (ownership)	52%	USD \$17,773.60/mo
CFC (ownership)	5%	USD \$1,709.00/mo
Indirect (ownership)	11%	USD \$3,759.80/mo
Fuel (operating) @ USD 3.65	29%	USD \$36.43/hr

Revised Date: 1st quarter 2022

These are the most accurate rates for the selected Revision Date(s). However, due to more frequent online updates, these rates may not match Rental Rate Blue Book Print. Visit the Cost Recovery Product Guide on our Help page for more information.

The equipment represented in this report has been exclusively prepared for AMBER DIAMOND
(amberdiamond@utah.gov)

Rental Rate Blue Book®

February 22, 2022

Caterpillar 980M

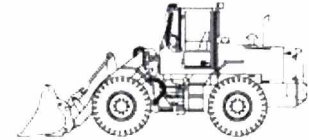
4-Wd Articulated Wheel Loaders

Size Class:

350 - 499 HP

Weight:

N/A


Configuration for 980M

Bucket Capacity
Operator Protection

16.0 cu yd
ROPS/FOPS

Horsepower
Power Mode

386.0 hp
Diesel
Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	USD \$12,570.00	USD \$3,520.00	USD \$880.00	USD \$135.00	USD \$59.55	USD \$130.97
Adjustments						
Region (100%)	-	-	-	-		
Model Year (2022: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)						
Total:	USD \$12,570.00	USD \$3,520.00	USD \$880.00	USD \$135.00	USD \$59.55	USD \$130.97

Non-Active Use Rates

Standby Rate
Idling Rate

Hourly

USD \$47.14
USD \$98.48

Rate Element Allocation

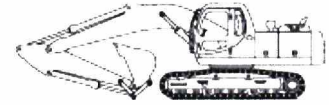
Element	Percentage	Value
Depreciation (ownership)	47%	USD \$5,907.90/mo
Overhaul (ownership)	34%	USD \$4,273.80/mo
CFC (ownership)	5%	USD \$628.50/mo
Indirect (ownership)	14%	USD \$1,759.80/mo
Fuel (operating) @ USD 3.65	45%	USD \$27.06/hr

Revised Date: 1st quarter 2022

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Rental Rate Blue Book®
Caterpillar 330F L
Crawler Mounted Hydraulic Excavators

Size Class:
28.1 - 33.0 MTons
Weight:
N/A

Configuration for 330F L

Bucket Capacity	2.3 cu yd	Horsepower	235 hp
Operating Weight	69950 lbs	Power Mode	Diesel

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	USD \$16,525.00	USD \$4,630.00	USD \$1,160.00	USD \$175.00	USD \$60.97	USD \$154.86
Adjustments						
Region (100%)	-	-	-	-		
Model Year (2022: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)						
Total:	USD \$16,525.00	USD \$4,630.00	USD \$1,160.00	USD \$175.00	USD \$60.97	USD \$154.86

Non-Active Use Rates

	Hourly
Standby Rate	USD \$50.70
Idling Rate	USD \$110.54

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	40%	USD \$6,610.00/mo
Overhaul (ownership)	46%	USD \$7,601.50/mo
CFC (ownership)	4%	USD \$661.00/mo
Indirect (ownership)	10%	USD \$1,652.50/mo
Fuel (operating) @ USD 3.65	27%	USD \$16.65/hr

Revised Date: 1st quarter 2022

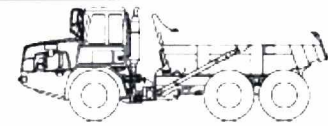
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Rental Rate Blue Book®

February 22, 2022

Caterpillar 725C2
Articulated Rear Dumps

Size Class:
26 - 29 MTons
Weight:
N/A

Configuration for 725C2

Power Mode **Diesel**
Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	USD \$16,920.00	USD \$4,740.00	USD \$1,185.00	USD \$180.00	USD \$59.87	USD \$156.01
Adjustments						
Region (100%)	-	-	-	-		
Model Year (2022: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	USD \$16,920.00	USD \$4,740.00	USD \$1,185.00	USD \$180.00	USD \$59.87	USD \$156.01

Non-Active Use Rates

	Hourly
Standby Rate	USD \$53.84
Idling Rate	USD \$118.03

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	40%	USD \$6,768.00/mo
Overhaul (ownership)	44%	USD \$7,444.80/mo
CFC (ownership)	4%	USD \$676.80/mo
Indirect (ownership)	12%	USD \$2,030.40/mo
Fuel (operating) @ USD 3.65	37%	USD \$21.89/hr

Revised Date: 1st quarter 2022

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GORDIAN®

Heavy Construction Costs

with RSMeans data

2022

36th annual edition

02 41 Demolition

02 41 13 - Selective Site Demolition

02 41 13.92 Selective Demolition, Parking Appurtenances

		Crew	Daily Output	Labor-Hours	Unit	Material	2022 Bare Costs		Total	Total Incl O&P
							Labor	Equipment		
0500	Flexible fixed garage stanchion	B-6	150	.160	Eu.		7.9	2.1	10.0	14.1
0600	Wheel stops, precast concrete		120	.200			9.9	2.7	12.6	17.7
0700	Thermoplastic		120	.200			9.9	2.7	12.6	17.7
0800	Pipe bollards, 6"-12" diam.		80	.300			14.8	4.1	18.9	26.5

02 41 16 - Structure Demolition

02 41 16.13 Building Demolition

0010	BUILDING DEMOLITION Large urban projects, incl. 20 mi. haul									R024119-10
0011	No foundation or dump fees, C.F. is vol. of building standing									
0020	Steel	B-8	21500	.003	C.F.		.16	.22	.38	48
0050	Concrete	B-8	15300	.004	C.F.		.22	.31	.53	.68
0080	Masonry		20100	.003			.17	.24	.41	.51
0100	Mixture of types		20100	.003			.17	.24	.41	.51
0500	Small bldgs, or single bldgs, no salvage included, steel	B-3	14800	.003			.17	.18	.35	45
0600	Concrete		11300	.004			.22	.24	.46	.58
0650	Masonry		14800	.003			.17	.18	.35	45
0700	Wood		14800	.003			.17	.18	.35	45
0750	For buildings with no interior walls, deduct								30%	30%
1000	Demolition single family house, one story, wood 1600 S.F.	B-3	1	48	Eu.		2,450	2,725	5,175	6,650
1020	3200 S.F.		.50	96			4,875	5,425	10,300	13,300
1200	Demolition two family house, two story, wood 2400 S.F.		.67	71.964			3,650	4,075	7,725	9,925
1220	4200 S.F.		.38	128			6,525	7,250	13,775	17,700
1300	Demolition three family house, three story, wood 3200 S.F.		.50	96			4,875	5,425	10,300	13,300
1320	5400 S.F.		.30	160			8,150	9,050	17,200	22,100
5000	For buildings with no interior walls, deduct								30%	30%

02 41 16.15 Explosive/Implosive Demolition

0010	EXPLOSIVE/IMPLOSIVE DEMOLITION									R024119-10
0011	Large projects,									
0020	No disposal fee based on building volume, steel building	B-5B	16900	.003	C.F.		.16	.20	.36	.45
0100	Concrete building		16900	.003			.16	.20	.36	.45
0200	Masonry building		16900	.003			.16	.20	.36	.45
0400	Disposal of material, minimum	B-3	445	.108	C.Y.		5.5	6.1	11.6	14.9
0500	Maximum	"	365	.132	"		6.7	7.4	14.1	18.1

02 41 16.17 Building Demolition Footings and Foundations

0010	BUILDING DEMOLITION FOOTINGS AND FOUNDATIONS									R024119-10
0200	Floors, concrete slab on grade,									
0240	4" thick, plain concrete	B-13L	5000	.003	S.F.		.20	.52	.72	.87
0280	Reinforced, wire mesh		4000	.004			.25	.65	.90	1.0
0300	Rods		4500	.004			.23	.58	.81	.97
0400	6" thick, plain concrete		4000	.004			.25	.65	.90	1.0
0420	Reinforced, wire mesh		3200	.005			.32	.81	1.1	1.3
0440	Rods		3600	.004			.28	.72	1	1.2
1000	Footings, concrete, 1' thick, 2' wide		300	.053	S.F.		3.3	8.6	12.0	14.5
1080	1'-6" thick, 2' wide		250	.064			4.0	10.3	14.4	17.4
1120	3' wide		200	.080			5.0	12.9	18	22
1140	2' thick, 3' wide		175	.091			5.8	14.8	20.6	25
1200	Average reinforcing, add								10%	10%
1220	Heavy reinforcing, add								20%	20%
2000	Walls, block, 4" thick	B-13L	8000	.002	S.F.		.13	.32	.45	.55
2040	6" thick		6000	.003			.17	.43	.60	.73
2080	8" thick		4000	.004			.25	.65	.90	1.0
2120	10" thick		3000	.005			.34	.86	1.2	1.4

58 Snow Control

13 - Snow Fencing

3.10 Snow Fencing System

SNOW FENCING SYSTEM

Snow fence on steel posts 10' OC, 4' high

Crew	Daily Output	Labor Hours	Unit	Material	2022 Bare Costs		Total	Total Incl O&P
					Labor	Equipment		
B-1	500	.048	L.F.	3.6	2.2		5.8	7.3

02 65 Underground Storage Tank Removal

02 65 10 - Underground Tank and Contaminated Soil Removal

02 65 10.30 Removal of Underground Storage Tanks

02 65 10.30 REMOVAL OF UNDERGROUND STORAGE TANKS

0010	Petroleum storage tanks, non-leaking								
0011	Excavate & load onto trailer								
0100	3,000 gal. to 5,000 gal. tank	G	B-14	4	12	Ea.	575	82	657 945
0110	6,000 gal. to 8,000 gal. tank	G	B-3A	3	13.333		645	330	975 1,325
0120	9,000 gal. to 12,000 gal. tank	G	"	2	20		970	495	1,465 2,000
0130	Known leaking tank, add					%			100% 100%
0190	Remove sludge, water and remaining product from bottom								
0200	at tank with vacuum truck								
0201	3,000 gal. to 5,000 gal. tank	G	A-13	5	1.600	Ea.	91	154	245 305
0300	6,000 gal. to 8,000 gal. tank	G	A-13	4	2	Ea.	114	192	306 380
0310	9,000 gal. to 12,000 gal. tank	G	"	3	2.667	"	152	257	409 510
0320	Dispose of sludge off-site, average					Gal.		6.2	6.8
0390	Insert inert solid CO ₂ "dry ice" into tank								
0400	For cleaning/transporting tanks (1.5 lb./100 gal. cap)	G	1 Clab	500	.016	Lb.	1.2	.73	1.9 2.4
0401	Disconnect and remove piping	G	1 Plum	160	.050	L.F.		3.4	3.4 5.2
0503	Transfer liquids, 10% of volume	G	"	1600	.005	Gal.		.35	.35 .52
0603	Cut accessway into underground storage tank	G	1 Clab	5.33	1.501	Ea.	68.5		68.5 102
0703	Remove sludge, wash and wipe tank, 500 gal.	G	1 Plum	8	1		70		70 104
0813	3,000 gal.	G		6.67	1.199		83.5		83.5 125
0823	5,000 gal.	G		6.15	1.301		91		91 135
0833	8,000 gal.	G		5.33	1.501		105		105 156
0843	10,000 gal.	G		4.57	1.751		122		122 182
0853	12,000 gal.	G		4.21	1.900		133		133 198
0863	Haul tank to certified salvage dump, 100 miles round trip								
1020	3,000 gal. to 5,000 gal. tank					Ea.			760 830
1023	6,000 gal. to 8,000 gal. tank								880 960
1026	9,000 gal. to 12,000 gal. tank								1,050 1,150
1029	Disposal of contaminated soil to landfill								
1100	Minimum					C.Y.			145 160
1110	Maximum					"			400 440
1111	Disposal of contaminated soil to bituminous concrete batch plant								
1120	Minimum					C.Y.			80 88
1130	Maximum					"			115 125
1131	Excavate, pull & load tank, backfill hole, 8,000 gal. +	G	B-12C	.50	32	Ea.	1,750	1,950	3,700 4,725
1203	Haul tank to certified dump, 100 miles rt, 8,000 gal. +	G	B-34K	1	8		425	890	1,315 1,625
1213	Excavate, pull & load tank, backfill hole, 500 gal.	G	B-11C	1	16		850	330	1,180 1,600
1223	Excavate, pull & load tank, backfill hole, 3,000-5,000 gal.	G	B-11M	.50	32		1,700	805	2,505 3,400
1233	Haul tank to certified dump, 100 miles rt, 500 gal.	G	B-34L	1	8		455	340	795 1,050
1243	Haul tank to certified dump, 100 miles rt, 3,000-5,000 gal.	G	B-34M	1	8		455	375	830 1,100
1253	Decontamination of soil on site incl poly tarp on top/bottom								
2010	Soil containment berm and chemical treatment								
2011	Minimum	G	B-11C	100	.160	C.Y.	7.9	8.5	3.2 19.6 25
2020	Maximum	G	"	100	.160	"	10.2	8.5	3.2 21.9 27.5

31 23 Excavation and Fill

31 23 23 - Fill

31 23 23.20 Hauling

		Daily	Labor-			2022 Bare Costs		
		Crew	Output	Hours	Unit	Material	Labor	Equipment
		B-34B			L.C.Y.			Total
1224	cycle 8 miles		108	.074			3.9	7.1
1225	cycle 10 miles		96	.083			4.4	8
1226	20 MPH avg., cycle 0.5 mile		264	.030			1.6	2.9
1228	cycle 1 mile		252	.032			1.6	3.0
1230	cycle 2 miles		216	.037			1.9	3.5
1232	cycle 4 miles		180	.044			2.3	4.2
1234	cycle 6 miles		144	.056			2.9	5.3
1236	cycle 8 miles		132	.061			3.2	5.8
1238	cycle 10 miles		108	.074			3.9	7.1
1240	25 MPH avg., cycle 4 miles		192	.042			2.2	4
1242	cycle 6 miles		168	.048			2.5	4.5
1244	cycle 8 miles		144	.056			2.9	5.3
1246	cycle 10 miles		132	.061			3.2	5.8
1250	30 MPH avg., cycle 4 miles		204	.039			2.0	3.7
1252	cycle 6 miles		180	.044			2.3	4.2
1254	cycle 8 miles		156	.051			2.7	4.9
1256	cycle 10 miles		144	.056			2.9	5.3
1260	35 MPH avg., cycle 4 miles		216	.037			1.9	3.5
1262	cycle 6 miles		192	.042			2.2	4
1264	cycle 8 miles		168	.048			2.5	4.5
1266	cycle 10 miles		156	.051			2.7	4.9
1268	cycle 20 miles		108	.074			3.9	7.1
1269	cycle 30 miles		72	.111			5.9	10.6
1270	cycle 40 miles		60	.133			7.0	12.8
1272	40 MPH avg., cycle 6 miles		192	.042			2.2	4
1274	cycle 8 miles		180	.044			2.3	4.2
1276	cycle 10 miles		156	.051			2.7	4.9
1278	cycle 20 miles		108	.074			3.9	7.1
1280	cycle 30 miles		84	.095			5.0	9.1
1282	cycle 40 miles		72	.111			5.9	10.6
1284	cycle 50 miles		60	.133			7.0	12.8
1294	45 MPH avg., cycle 8 miles		180	.044			2.3	4.2
1296	cycle 10 miles		168	.048			2.5	4.5
1298	cycle 20 miles		120	.067			3.5	6.4
1300	cycle 30 miles		96	.083			4.4	8
1302	cycle 40 miles		72	.111			5.9	10.6
1304	cycle 50 miles		60	.133			7.0	12.8
1306	50 MPH avg., cycle 10 miles		180	.044			2.3	4.2
1308	cycle 20 miles	B-34B	132	.061	L.C.Y.		3.2	5.8
1310	cycle 30 miles		96	.083			4.4	8
1312	cycle 40 miles		84	.095			5.0	9.1
1314	cycle 50 miles		72	.111			5.9	10.6
1414	15 MPH avg., cycle 0.5 mile, 25 min. wait/lid./uld.		204	.039			2.0	3.7
1416	cycle 1 mile		192	.042			2.2	4
1418	cycle 2 miles		168	.048			2.5	4.5
1420	cycle 4 miles		132	.061			3.2	5.8
1422	cycle 6 miles		120	.067			3.5	6.4
1424	cycle 8 miles		96	.083			4.4	8
1425	cycle 10 miles		84	.095			5.0	9.1
1426	20 MPH avg., cycle 0.5 mile		216	.037			1.9	3.5
1428	cycle 1 mile		204	.039			2.0	3.7
1430	cycle 2 miles		180	.044			2.3	4.2
1432	cycle 4 miles		156	.051			2.7	4.9

54 | Construction Aids

1 54 33 | Equipment Rental

EQUIPMENT LIST/DAY		UNIT	HOURLY OPER. COST	RENT PER DAY	RENT PER WEEK	RENT PER MONTH	EQUIPMENT COST/DAY	
2,014.40	110	75 ton capacity	Ea	11.43	305	941.21	279.72	40
2,018.54	110	Trailer mounted cable reel for high voltage line work		6.06	252.67	758	200.11	
2,338.01	1320	Trailer mounted cable tensioning rig		12.03	83.33	250	146.21	
1,785.75	6830	Cable pulling rig		76.00	142.50	427.50	693.54	
2,579.95	6850	Portable cable/wire puller, 8000 lb max pulling capacity		3.81	189.35	524.76	135.46	
66.43	6900	Water tank trailer, engine driven discharge, 5000 gallons		7.39	160	498.58	158.82	
57.48	6925	10,000 gallons		10.06	218	677.42	216	
76.61	6950	Water truck, off highway, 6000 gallons		74.06	1,333.33	4,000	1,392.52	★
392.30	7010	Tram car for high voltage line work, powered, 2 conductor		7.09	29.33	88	74.32	
29.90	7020	Transit (builder's level) with tripod		1.0	51.78	129.89	26.79	
34.76	7030	Trench box, 3000 lb., 6' x 8'		.58	97.50	304	65.42	
47.78	7040	7200 lb., 6' x 20'		.74	189	587.69	123.46	
90.35	7050	8000 lb., 8' x 16'		1.11	205	637.76	136.44	
167.10	7060	9500 lb., 8' x 20'		1.24	235	731.61	156.25	
308.97	7065	11,000 lb., 8' x 24'		1.30	221	688.25	148.07	
33.28	7070	12,000 lb., 10' x 20'		1.54	267	829.16	178.14	
59.79	7100	Truck, pickup, 3/4 ton, 2 wheel drive		9.53	62.50	194.01	115.08	★
77.51	7200	4 wheel drive		9.79	174.39	508.64	180.03	
141.52	7250	Crew carrier, 9 passenger		13.07	109	340.44	172.61	
100.91	7290	Flat bed truck, 20,000 lb. GVW		15.75	134	417.29	209.49	
109.42	7300	Tractor, 4 x 2, 220 H.P.		22.97	218	677.42	319.23	
779.96	7410	330 H.P.		33.37	298	926.71	452.31	
847.30	7500	6 x 4, 380 H.P.		37.26	345	1,073.03	512.66	
77.86	7600	450 H.P.		45.66	420	1,300.64	625.39	
199.70	7610	Tractor, with A frame, boom and winch, 225 H.P.		25.54	296	919.57	388.20	
347.88	7620	Vacuum truck, hazardous material, 2500 gallons		13.20	315	975.48	300.72	
331.07	7625	5,000 gallons		13.44	445	1,381.93	383.94	
57.17	7650	Vacuum, HEPA, 16 gallon, wet/dry		.88	134.09	386.21	84.26	
27.34	7655	55 gallon, wet/dry		.80	33.91	86.79	23.77	
83.94	7660	Water tank, portable		.75	147.40	425.74	91.17	
166.28	7690	Sewer/catch basin vacuum, 14 C.Y., 1500 gallons		17.87	670	2,086.44	560.27	
16.09	7700	Welder, electric, 200 amp		3.94	36.22	80.22	47.54	
46.72	7800	300 amp		5.73	32.08	81.30	62.07	
27.83	7900	Gas engine, 200 amp		9.23	102.73	283.48	130.57	
48.47	8000	300 amp		10.45	112.44	318.78	147.37	
50.34	8100	Wheelbarrow, any size		.07	13.94	34.91	7.51	
55.44	8200	Wrecking ball, 4000 lb.	↓	2.58	62	186	57.84	
66.79								
66.39	50	0010 HIGHWAY EQUIPMENT RENTAL without operators						50
9.97	0050	Asphalt batch plant, portable drum mixer, 100 ton/hr.	R015433 -10 Ea	91.26	1,550	4,850.30	1,700.12	
27.71	0060	200 ton/hr.		105.27	1,675	5,175.46	1,877.29	
34.72	0070	300 ton/hr.		123.72	1,950	6,069.65	2,203.69	
15.77	0100	Backhoe attachment, long stick, up to 185 H.P., 10.5' long		.38	26	80.21	19.09	
70.52	0140	Up to 250 H.P., 12' long		.42	29	89.96	21.39	
79.60	0180	Over 250 H.P., 15' long		.58	39.50	122.48	29.16	
18.64	0200	Special dipper arm, up to 100 H.P., 32' long		1.19	80.50	250.37	59.63	
1.82	0240	Over 100 H.P., 33' long		1.49	101	314.32	74.79	
3.37	0280	Catch basin/sewer cleaning truck, 3 ton, 9 C.Y., 1000 gal.		36.53	425	1,327.74	557.79	
7.16	0300	Concrete batch plant, portable, electric, 200 C.Y./hr.		24.96	565	1,761.28	551.97	
5.61	0520	Grader/dozer attachment, ripper/scarifier, rear mounted, up to 135 H.P.		3.25	64	199.43	65.90	
9.33	0540	Up to 180 H.P.		4.27	97	301.31	94.41	
3.06	0580	Up to 250 H.P.		6.04	155	482.32	144.78	
4.86	0700	Pymt. removal bucket, for hyd. excavator, up to 90 H.P.		2.23	59	183.17	54.46	
3.21	0740	Up to 200 H.P.		2.38	75.50	234.11	65.86	
3.56	0780	Over 200 H.P.		2.60	92.50	287.22	78.24	
.42	0900	Aggregate spreader, self-propelled, 187 H.P.		52.23	750	2,330.31	883.90	
.29	1000	Chemical spreader, 3 C.Y.		3.26	70	210	68.11	
.01	1900	Hammermill, traveling, 250 H.P.	↓	69.39	600	1,800	915.14	

Contractor's Overhead & Profit

The average installing contractor's percentage markups to base labor rates to arrive at typical billing rates.

Column A: Labor rates are based on union wages averaged for 30 major U.S. cities. Base rates, including fringe benefits, are listed hourly and daily. These figures are the sum of the wage rate and employer-paid fringe benefits such as vacation pay, employer-paid health and welfare costs, and pension costs, plus appropriate training and industry advancement funds costs.

Column B: Workers' compensation rates are the national average of state rates established for each trade.

Column C: Column C lists average fixed overhead figures for all trades. Included are federal and state unemployment costs set at 8%; social security taxes (FICA) set at 7.65%; builder's risk insurance costs set at 0.80%; and public liability costs set at 2.02%. All percentages, except those for social security taxes, vary from state to state as well as from company to company.

Columns D and E: Percentages in Columns D and E are based on the presumption that the installing contractor has annual billing of \$4,000,000 and up. Overhead percentages may increase with smaller annual billing. The overhead percentages for any given contractor may vary greatly and depend on a number of factors such as the contractor's annual volume, engineering and logistical support costs, and staff requirements. The figures for overhead and profit will also vary depending on the type of job, the job location, and the prevailing economic conditions. All factors should be examined very carefully for each job.

Column F: Column F lists the total of Columns B, C, D, and E.

Column G: Column G is Column A (hourly base labor rate) multiplied by the percentage in Column F (O&P percentage).

Column H: Column H is the total of Column A (hourly base labor rate) plus Column G (Total O&P).

Column I: Column I is Column H multiplied by eight hours.

		A		B	C	D	E	F	G	H	I
Abbr.	Trade	Base Rate Incl. Fringes		Work-ers' Comp. Ins.	Average Fixed Over-head	Over-head	Profit	Total Overhead & Profit		Rate with O & P	
		Hourly	Daily					%	Amount	Hourly	Daily
Skwk	Skilled Workers Average (35 trades)	\$58.90	\$471.20	8.7%	18.5%	13.0%	10%	50.2%	\$29.55	\$ 88.45	\$ 707.60
	Helpers Average (5 trades)	43.30	346.40	11.6		11.0		51.1	22.15	65.45	523.60
	Foreman Average, Inside (\$0.50 over trade)	59.40	475.20	8.7		13.0		50.2	29.80	89.20	713.60
	Foreman Average, Outside (\$2.00 over trade)	60.90	487.20	8.7		13.0		50.2	30.60	91.50	732.00
	Common Building Laborers	45.60	364.80	9.4		11.0		48.9	22.30	67.90	543.20
Clab	Asbestos/Insulation Workers/Pipe Coverers	63.05	504.40	8.5		16.0		53.0	33.40	96.45	771.60
	Boilermakers	70.50	564.00	4.8		16.0		49.3	34.75	105.25	842.00
	Bricklayers	55.25	442.00	10.6		11.0		50.1	27.65	82.90	663.20
	Bricklayer Helpers	45.00	360.00	10.6		11.0		50.1	22.55	67.55	540.40
	Carpenters	56.30	450.40	9.4		11.0		48.9	27.50	83.80	670.40
Cefi	Cement Finishers	53.15	425.20	6.8		11.0		46.3	24.60	77.75	622.00
	Electricians	66.20	529.60	4.1		16.0		48.6	32.20	98.40	787.20
	Elevator Constructors	93.55	748.40	3.5		16.0		48.0	44.95	138.50	1108.00
	Equipment Operators, Crane or Shovel	63.40	507.20	6.3		14.0		48.8	30.95	94.35	754.80
	Equipment Operators, Medium Equipment	60.40	483.20	6.3		14.0		48.8	29.45	89.85	718.80
Eqit	Equipment Operators, Light Equipment	57.00	456.00	6.3		14.0		48.8	27.80	84.80	678.40
	Equipment Operators, Oilers	54.00	432.00	6.3		14.0		48.8	26.35	80.35	642.80
	Equipment Operators, Master Mechanics	63.50	508.00	6.3		14.0		48.8	31.00	94.50	756.00
	Glaziers	54.00	432.00	9.1		11.0		48.6	26.25	80.25	642.00
	Lathers	56.00	448.00	6.5		11.0		46.0	25.75	81.75	654.00
Marb	Marble Setters	55.05	440.40	10.6		11.0		50.1	27.55	82.60	660.80
	Millwrights	60.55	484.40	5.0		11.0		44.5	26.95	87.50	700.00
	Mosaic & Terrazzo Workers	53.40	427.20	6.6		11.0		46.1	24.60	78.00	624.00
	Painters, Ordinary	47.80	382.40	8.7		11.0		48.2	23.05	70.85	566.80
	Painters, Structural Steel	48.90	391.20	20.1		11.0		59.6	29.15	78.05	624.40
Pape	Paper Hangers	48.05	384.40	8.7		11.0		48.2	23.15	71.20	569.60
	Pile Drivers	58.20	465.60	10.2		16.0		54.7	31.85	90.05	720.40
	Plasterers	51.40	411.20	9.1		11.0		48.6	25.00	76.40	611.20
	Plasterer Helpers	45.85	366.80	9.1		11.0		48.6	22.30	68.15	545.20
	Plumbers	69.80	558.40	4.6		16.0		49.1	34.30	104.10	832.80
Rodm	Rodmen (Reinforcing)	60.70	485.60	6.8		14.0		49.3	29.95	90.65	725.20
	Roofers, Composition	49.60	396.80	22.6		11.0		62.1	30.80	80.40	643.20
	Roofers, Tile & Slate	49.60	396.80	22.6		11.0		62.1	30.80	80.40	643.20
	Roofers, Helpers (Composition)	37.25	298.00	22.6		11.0		62.1	23.15	60.40	483.20
	Sheet Metal Workers	67.55	540.40	6.2		16.0		50.7	34.20	101.75	814.00
Sprk	Sprinkler Installers	68.55	548.40	4.8		16.0		49.3	33.75	102.30	818.40
	Steamfitters or Pipefitters	70.35	562.80	4.6		16.0		49.1	34.55	104.90	839.20
	Stone Masons	55.60	444.80	10.6		11.0		50.1	27.85	83.45	667.60
	Structural Steel Workers	61.85	494.80	11.5		14.0		54.0	33.40	95.25	762.00
	Tile Layers	53.15	425.20	6.6		11.0		46.1	24.50	77.65	621.20
Tilh	Tile Layers Helpers	42.80	342.40	6.6		11.0		46.1	19.75	62.55	500.40
	Truck Drivers, Light	50.40	403.20	9.9		11.0		49.4	24.90	75.30	602.40
	Truck Drivers, Heavy	53.05	424.40	9.9		11.0		49.4	26.20	79.25	634.00
	Welders, Structural Steel	61.95	495.60	11.5		14.0		54.0	33.45	95.40	763.20
	*Wrecking	45.60	364.80	11.6		11.0		51.1	23.30	68.90	551.20

*Not included in averages

Heavy Construction Costs with RSMeans data

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